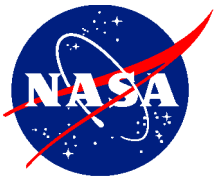

National Aeronautics and
Space Administration

NOT MEASUREMENT
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NASA-STD-2819
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COLLABORATIVE TOOLS STANDARDS

NASA TECHNICAL STANDARD

FOREWORD

This standard is approved for use by NASA Headquarters and all NASA Centers and is intended to provide a common framework for consistent practices across NASA programs.

The material covered in this standard is based on the consensus judgment of the NASA Chief Information Officer (CIO) Board and the NASA Information Technology (IT) Investment Council. The purpose of this standard is to establish a set of common Collaborative Tools that are readily accessible to NASA workgroups and enable collaboration and sharing of information and knowledge.

Requests for information, corrections, or additions to this standard should be directed to Glenn Research Center (GRC), the Principal Center for Workgroup Hardware and Software, Code 7100, MS 142-2, Cleveland, OH, 44135. Requests for general information concerning standards should be sent to NASA Technical Standards Program Office, ED41, MSFC, AL, 35812 (telephone 205-544-2448). This and other NASA standards may be viewed and downloaded, free-of-charge, from our NASA Standards Homepage: http://standards.nasa.gov .

Lee B. Holcomb
Chief Information Officer

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COLLABORATIVE TOOLS STANDARDS

1. SCOPE

1.1 Purpose and Scope. This document establishes standards for collaborative tools at NASA. Both synchronous and asynchronous collaborative tools are addressed. This standard provides for readily accessible, interoperable, and standards based collaborative tools so that NASA centers and external partners can collaborate and share information in support of the NASA mission.

1.2 Applicability. This standard applies to all NASA centers, programs, and projects.

2. ACRONYMS AND DEFINITIONS

2.1 Acronyms

2.1.1	POTS	Plain Old Telephone Service
2.1.2	TBD	To Be Determined
2.1.3	PC WHS	Principal Center for Workgroup Hardware and Software
2.1.4	WWW	World Wide Web
2.1.5	ITU	International Telecommunications Union
2.1.6	HTTP	Hypertext Transfer Protocol
2.1.7	NIITA	NASA Integrated Information Technology Architecture

2.2 Definitions

2.2.1	T.120 Series	A series of ITU standards for data conferencing

3. DETAILED REQUIREMENTS

3.1 Architectural Compliance Requirements. NASA has baselined and approved an initial NASA Integrated Information Technology Architecture (NIITA) as NASA STD-2814. The architecture is predicated on selecting standards for a broad and cost-effective infrastructure that provides for reliance on commercial off-the-shelf products and commercial services as much as possible; interoperability both within and external to NASA; flexibility for future growth; and consistency with generally accepted consensus standards as much as feasible. Among these objectives, interoperability is one of NASA's most critical issues related to information technology.

NIITA discusses a "Collaborative Workgroup System" as a major component of the NASA computing environment. Further, the NIITA Technical Architecture specifies client "Collaborative Applications" and "Collaboration Services". This standard realizes these collaborative components of NIITA.

For collaboration across NASA and external partners, NASA will be best served by specifying ubiquitous collaborative client applications that are available everywhere, complemented by a set of standard collaborative services. Standard services promote collaboration and information-sharing across NASA centers and external partners and also promote a change in culture by providing a common collaborative environment to all NASA workgroups.

3.2 Interface and Product/Services Standards. The following standards are established for collaborative tools:

Synchronous Tools – Clients (See Table I. for recommended client products)

Component	Interface Standard
Voice Conferencing Client	POTS
Data Conferencing Client	T.120 Series
Video Conferencing Client	TBD * See Note 1

* Note 1: This and all TBDs in this document will be addressed in a future release of this standard.

Synchronous Tools – Services

Component	Interface Standard	Product/Service(s) Standard
Voice Conferencing	POTS	TBD ** See Note 2
Data Conferencing	T.120 Series	TBD ** See Note 2
Video Conferencing	TBD	TBD

** Note 2: TBDs will be addressed in a future release; however, current suggested practices for voice and data conferencing are documented in the "Deployment Guidelines for Real-Time Collaboration Including NetMeeting and T.120 Clients" (http://www.grc.nasa.gov/WWW/LeadCenter/LCdocs/guidelines.html).

Asynchronous Tools – Clients (See Table I. for recommended client products)

Component	Interface Standard
Document/Knowledge repository	HTTP
Project collaboration	HTTP
Workflow	HTTP

Asynchronous Tools – Services

Component	Interface Standard	Product/Service(s) Standard
Document/Knowledge repository	HTTP	TBD
Project collaboration	HTTP	TBD
Workflow	HTTP	TBD

3.3 Future Interface and Product/Service Standards. The collaborative tools marketplace is evolving rapidly. The PC WHS plans to continually capture NASA requirements and survey IT industry capability in this area. This standard will be updated as warranted based on these drivers.

4. REVIEW AND REPORTING REQUIREMENTS

4.1 Implementation Reporting. TBD

4.2 Standard Review Reporting. The Principal Center for WHS will review this standard on an as-required basis, not to exceed 6-month intervals.

5. DURATION

This standard will remain in effect until canceled or modified by the NASA CIO.

TABLE I. Collaborative Client Software Products

Component	PC Windows Product	Macintosh Product	Sun Solaris Product	SGI Irix Product	HP UX Product	Status
Synchronous Tools						
Voice Conferencing	POTS	POTS	POTS	POTS	POTS	Recommended
Data Conferencing	MS NetMeeting 2.11	Netopia Timbuktu Conference	Sun SunForum 3.0	SGI SGIMeeting 1.1	TBD	Recommended
Video Conferencing	TBD	TBD	TBD	TBD	TBD	Future
Asynchronous Tools						
Document/Knowledge Repository (WWW Browser)	Reference: NASA STD-2804	Reference: NASA-STD-2804	Reference: NASA-STD-2810	Reference: NASA-STD-2810	Reference: NASA-STD-2810	Future
Project Collaboration (WWW Browser)	Reference: NASA STD-2804	Reference: NASA STD-2804	Reference: NASA STD-2810	Reference: NASA STD-2810	Reference: NASA STD-2810	Future
Workflow (WWW Browser)	Reference: NASA-STD-2804	Reference: NASA-STD-2804	Reference: NASA-STD-2810	Reference: NASA-STD-2810	Reference: NASA-STD-2810	Future

Legend:

Mandatory Specified PRODUCT required for Interoperable Workstations.

Recommended Specified FEATURE required for Interoperable Workstations. Product is recommended, but a compatible product may be used at the discretion of the Center CIO.

Optional Capabilities not required for workstation interoperability but useful if functionality is required.

Future Standards for the specified capability will be defined in the future.